

# **EXHIBIT 8**



# Google

• [Cast](#)

[Home](#) [Guides](#) [Reference](#) [Samples](#) [Support](#)



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• [Cast](#)

- [Home](#)
- [Guides](#)
- [Reference](#)
- [Samples](#)
- [Support](#)
- Cast SDK
  - [Get Started](#)
  - [Registration](#)
  - [Terms of Service](#)
  - [Glossary](#)
- Sender Apps
- Develop Android Sender App
  - [Setup](#)
  - [Integrate Cast](#)
  - [Customize UI](#)
  - [Automate UI Tests](#)
  - Add Advanced Features
    - [Media Tracks](#)
    - [Queueing](#)
    - [Intent to Join](#)
    - [Additional Features](#)
  - [ExoPlayer Integration](#)
- Develop iOS Sender App
  - [Setup](#)
  - [iOS Permissions Changes](#)
  - [Integrate Cast](#)
  - [Customize UI](#)
  - Add Advanced Features
    - [Media Tracks](#)

- [Queueing](#)
  - [Additional Features](#)
- Develop Chrome Sender App
  - [Setup](#)
  - [Integrate Cast](#)
  - [Add Advanced Features](#)
- [Discovery Troubleshooting](#)
- [Guest Mode](#)
- Migrate Sender v2 App to CAF
  - [From Cast Companion Library](#)
  - [From Android SDK v2](#)
  - [From iOS SDK v2](#)
- Receiver Apps
- Develop Web Receiver App
  - [Overview](#)
  - [Styled Media Receiver](#)
  - [Create a Basic Receiver](#)
  - [Customize UI](#)
  - [Core Features](#)
  - [Streaming Protocols](#)
  - Add Advanced Features
    - [Tracks](#)
    - [Queueing](#)
    - [Ad Breaks](#)
    - [Live](#)
  - Debugging
    - [Chrome Remote Debugger](#)
    - [Cast Debug Logger](#)
    - [Command and Control \(CaC\) Tool](#)
  - [Error Codes](#)
- Develop Android TV Receiver App
  - [Overview](#)
  - [Core Features](#)
  - Add Advanced Features
    - [Tracks](#)
    - [Queueing](#)
    - [Ad Breaks](#)
  - Debugging
  - [Troubleshooting](#)
- [Migrate Receiver v2 to CAF](#)
- Design Guide
- [UX Guidelines](#)
- Design Checklist
  - [Overview](#)
  - [Cast basics](#)
  - [Cast button](#)
  - [Cast dialog](#)
  - [Cast autoplay](#)
  - [Sender app](#)
  - Receiver app
    - [Non-Touch](#)
    - [Touch](#)
  - [Changelog](#)
- Test Cases
- [Testing Cast Apps](#)
- Devices
- [Audio Devices](#)
- [Home](#)
- [Products](#)
- [Cast](#)
- [Guides](#)

## Queueing

## Overview

**Queueing** allows partner applications to better integrate with Cast by providing the following features:

- **Support of Google's** and partner's **cloud queue implementation so externally stored and created queue can be directly loaded into Cast devices.**
- Mechanisms that allows pagination of items in the queue rather than loading everything at once.
- Support for new messaging such as going to the next item, the previous item, fetching a window of items, as well as getting media information related to a set of queue items.
- Better integration with the Cast eco-system such as Google Home and Google Assistant through new queueing data.
- An easy-to-use `QueueManager` API that allows insertion, removal, and update of queue items.

## Creating a queue

Application developers can create a Web Receiver side queue by implementing `cast.framework.QueueBase`.

Here is a basic example of a simple queue where the `initialize` call is overridden and then a list of queue items along with queue descriptions are provided to the Cast device.

**Tip:** Also see [Loading media using contentId, contentUrl and entity](#).

```
// Creates a simple queue with a combination of contents.
const DemoQueue = class extends cast.framework.QueueBase {
  constructor() {
    super();
  }

  /**
   * List of media urls.
   * @private @const {!Array<string>}
   */
  this.myMediaUrls_ = [...];
}

/**
 * Provide a list of items.
 * @param {!cast.framework.messages.LoadRequestData} loadRequestData
 * @return {!cast.framework.messages.QueueData}
 */
initialize(loadRequestData) {
  const items = [];
  for (const mediaUrl of this.myMediaUrls_) {
    const item = new cast.framework.messages.QueueItem();
    item.media = new cast.framework.messages.MediaInformation();
    item.media.contentId = mediaUrl;
  }
}
```